

CZECHOSLOVAKIA/Human and Animal Physiology. Internal Secretion

T-8

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65534

Author : Kandrak Michal, Slavik Karel

Inst : Universitas Carolina

Title : Intermediary Metabolism in Diabetic Patients and the Effect of Insulin in Diabetes.

Orig Pub : Univ. carolina. Med., 1955, Suppl. No 1, 385-397

Abstract : The urinary content of ketone bodies in 9 patients with decompensated diabetes was determined by paper chromatography. Many acetone bodies were detected in the urine of most of the patients, in the presence of negligible amounts of the conversion products of  $\Delta$ -ketoacids and pyruvic acid. With prolonged use of insulin the amount of acetone bodies in the urine decreased. In a case in which there was considerable resistance to insulin (3000 units per day), dioxycetone, glyceraldehyde and, in lesser amounts,  $\alpha$ -ketoacids were detected in the urine. After the insulin

Card : 1/2

KANDRAC, Michal, Dr.; DVORAK, Ladislav, Dr.; SLAVIK, Karel, Dr.;  
ZKRUZNA, Olga, Dr.

Insulin resistance and its biochemical characteristics in a  
case of unusually juvenile diabetes. Sborn. lek. 57 no.9:  
221-243 Nov 55.

1. III. Interní klinika Karlovy university v Praze, prednosta  
akademik Charvat ustredni laboratore SFN v Praze, prednosta prof.  
VUDr. J. Horejsi.

(INSULIN, therapeutic use,  
diabetes mellitus, resist.)  
(DIABETES MELLITUS, therapy,  
insulin, resist.)

SLAVIK, KAREL

Estimation of pepsin activity in gastric juice. V. Matoušková and Karel Slavík (Státní fak. nemocnice 1, Prague). *Časopis Lékár. Čechy* 94, 310-12(1958).—2.5 g. casein (I), prepd. according to Hammarsten, is triturated with several portions of 0.1N HCl and made to 800 ml. with 0.1N HCl. Some drops of  $H_2O$  are added. This suspension is stable for about a week in the refrigerator; 10 ml. is incubated with 0.5 ml. gastric juice at 37°. Samples (3 ml.) are drawn at 0 and 15 min. of incubation and mixed with 3 ml. 5%  $CCl_3COOH$ . The mixt. is filtered through Whatman 2 paper and 3 ml. mixed with 1 ml. 2N NaOH and 2 ml. of the biuret reagent (90 g. Na K tartrate, 10 g.  $CuSO_4 \cdot 5H_2O$ , and 10 g. KI made to 2 l. with 0.2N NaOH). The color is read after 30 min. at 530 m $\mu$  (green filter) against a blank. Activity of pepsin (II) is expressed by the difference between the initial and 15-min. value. It is calibrated in terms of percentage of I digested during 15 min. A standard curve is constructed from the biuret readings of suitably dild. I (without  $CCl_3COOH$ ). Ten % digestion represents 1 unit of II activity. The range found in 100 samples of gastric juice was 0-5.5 units, av. 1.5-2.5 units, standard deviation  $\pm 0.9$  units. Examples of the II and acidity curves after histamine are shown. Before analysis gastric juice must be stored in a refrigerator and processed as early as possible, owing to the deterioration of II. Filtration of the juice through gauze is recommended.

I. M. Hais

SLAVIK, KAREL

Bezpecnost a hygiena v automobilove dopravě (napsali) Karel Slavík (a) Stanislav Marek. (lvyd) Praha, Vydavatelstvo ROH, 1956. 257 p. (Safety and hygiene in automobile transportation. 1st. ed. illus.)

DNLM

Not in DLC

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,  
April 1958

*Slavik Karel*

USSR / General Biology. Physical and Chemical Biology

B-1

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 204

Author : Slavik Karel

Inst : Not Given

Title : Metabolism of Folic Acid in Mammals

Orig Pub : Chekhosl. med. obzor., 1956, 2, No 2, 151-154

Abstract : Leucovorine (5-formyltetrahydrofolic acid) (I) is supposedly only a precursor of active co-enzymes. Under physiological conditions it disintegrates non-enzymatically into dihydroxanthoprotein, which explains the presence of urinary xanthoprotein. I is converted enzymatically into 10-exymethylfolic acid. Diagrams are given which illustrate presently known chemical transformations of folic acid, particularly through formation of active co-enzymes.

Card : 1/1

Slavik, Karel

Metabolism of folic acid. III. Transformations of  
leucovorin. Karel Slavik and Věra Slavíková-Matoušková  
(Ústřední lab. fak. nemocnice, Prague). *Chem. Listy* 50,  
1141-6(1956); cf. *C.A.* 48, 13748b.—Leucovorin (I)  
decomp. in aq. solns. and forms at pH 7, dihydroxanthop-  
terin which was identified by mixed chromatography and  
by absorption spectra. Enzymes isolated from pork liver  
decomp. I to a metabolite with yellow-green fluorescence  
which was identified as *N*<sup>6</sup>-hydroxymethylfolic acid accord-  
ing to the absorption spectra and degradation products.  
M. Hudlický

2

7/11/56

SLAVIK, K.

Insulin resistance and its biochemical characteristics in a case of severe juvenile diabetes. M. S. Kandrás, L. Dvorník, K. Slavík, and O. Skružná (III. intern. klin., Prague). *Časopis Lékařů Českých* 95, 593-600 (1959). By the means of paper chromatography of 2,4-dinitrophenyl hydrazones in water-saturated n-butanol-EtOH mixture (9:1) the excretion of  $\alpha$ -ketoglutaric acid (I), pyruvic acid (II), oxaloacetic acid (III), dihydroxyacetone (IV), glyceraldehyde (V), acetone (VI), and acetoacetic acid (VII) in the urine of an 18-year-old male patient in the above state, who developed severe insulin (VIII) resistance, was studied. At the height of VIII resistance (when the patient was kept on 3000 units of I/day) he excreted in the urine mainly IV and V, some VI and VII, a small amt. of I and III, but greater amts. of II. After infusion of glucose (0.5g./kg.) the elimination of IV and V in urine further increased. During the large doses of VIII (3700 units/day) the patient suddenly became VIII-sensitive. At the period of relatively good VIII-sensitivity (the daily need was 110 units of VIII) the patient eliminated during the night hours mainly VI and VII. After a diet rich in carbohydrates great amts. of III were found, VI and VII gradually disappeared and no IV and V could be detected. After a diet rich in proteins and fats mainly VI and VII with traces of IV were excreted. In the morning after the meal and VIII there was a transitory increase in the excretion of III while the excretion of VI and VII temporarily decreased. In the afternoon and night, however, mainly VI and VII were excreted. It is suggested that at the time of max. VIII-resistance a partial block of anaerobic and also of aerobic glycolysis occurs with a retardation of chain reactions of glycolysis. In the period of relatively good VIII-sensitivity when the patient eliminated relatively the highest quantity of III, a block in condensation of III with the acetylcoenzyme A was probably present. III, not fully utilized in Krebs cycle, is excreted in urine.

The central metabolic lesion was probably in the liver.  
Zentšek

SLAVIK, F. : SLAVIKOVA-PATOULKOVA, V.

"Metabolism of folic acid. III. Transformation of folic acid-3F.  
In Russian."

p. 125 (COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SBORNÍK  
ČESKOSLOVATSKÝCH KEMICKÝCH PRÁCE. -- Praha, Czechoslovakia.)  
Vol. 22, No. 1, Feb. 1957

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958



SLAVIK, K. ; DVORAKOVA, A. ; SLAVIKOVA, V.

"Folic acid metabolism. IV. Changes of the folic acid derivatives in vivo."  
p. 1536 (Chemické listy, Vol. 51, no. 8, Aug. 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6 June 1958

SLAVIK, K. ; TOMASOVA, H. ; SLAVIKOVA, V.

"Folic acid metabolism. V. Enzymatic conversion of aminopterin to H<sub>(10)</sub>-formylaminopterin."

p. 1540 (Chemické Listy, Vol. 51, no. 8, Aug. 1957, Praha, Czechoslovakia.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No.6 June 1958

SLAVIK, K.; SLAVIKOVA, V.; KOLMAN, Z.

Metabolism of folic acid. VI. Preparation of intermediary antimetabolites of folic acid. Coll Cz Chem 25 no.7:1929-1937 J1 '60.  
(EEAI 10:9)

1. Laboratory for Protein Metabolism and Synthesis, and Institute of Haematology and Blood Transfusion, Prague.

(Folic acid)

MOTYCKA, K.; SOCHMAN, J.; SLAVIKOVA, V.; SLAVIK, K.

The difference in mechanism of action of aminopterin and some of its derivatives. *Physiol. Bohemoslov.* 11 no.2:101-106 '62.

1. Institute of Haematology and Blood Transfusion, and Laboratory of Protein Metabolism, Charles University, Prague.

(AMINOPTERIN pharmacol)

SLAVIKOVA, V.; SLAVIK, K.; PRISTOUPILOVA, K.

Metabolism of folic acid. Part 8: Mechanism of biochemical action of some 4-amino analogues of folic acid and their dibromo derivatives. Coll Cz Chem 27 no.8:1955-1963 Ag '62.

1. Laboratory for Protein Metabolism and Synthesis, and Institute of Hematology and Blood Transfusion, Prague.

\*

RADA, B.; BLASKOVIC, D.; SLAVIK, K.

Screening of antimetabolites inhibiting virus multiplication.

III. Folic acid antimetabolites as inhibitors of virus multiplication.  
Acta virol. 7 no.3:275-276 My '63.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava,  
and Laboratory of Protein Metabolism and Synthesis, Charles University,  
Prague.

(ANTIMETABOLITES) (VACCINIA VIRUS) (ENCEPHALITIS VIRUSES)  
(NEWCASTLE DISEASE VIRUS) (FOLIC ACID ANTAGONISTS)  
(ANTIVIRAL AGENTS)

CZECHOSLOVAKIA

SOUCEK, J; MOTYCKA, K; SLAVIK, K; SOCHMAN, J.

1. Institute of Haematology and Blood Transfusion, Prague;
2. Laboratory for Protein Metabolism and Synthesis,  
Prague

Prague, Collection of Czechoslovak Chemical Communications,  
Vol 8, 1963, pp 2222-2226

"Metabolism of Folic Acid. IV. Mechanism of Biochemical  
Action of Some Folic Acid Antimetabolites in vivo."

SOUCEK, J.; SOCHMAN, J.; SLAVIK, K.

Activity changes of some enzyme systems interfering into the metabolism of folic acid in the livers of mice in the course of LaHVUFB leucaemia. Neoplasma 10 no.2:177-182 '63.

1. Institute of Haematology and Blood Transfusion, Laboratory of Protein Metabolism, Prague, CSSR.

(LEUKEMIA, EXPERIMENTAL)	(FOLIC ACID ANTAGONISTS)
(LIVER)	(METABOLISM)
(ALDOLASE)	(DEHYDROGENASES)
	(TRANSFERASES)
	(OXIDOREDUCTASES)



SLAVIK, K.

"Biochemistry" by F.B. Straub. Reviewed by K. Slavik. Chem  
listy 57 no.7:744-745 JI '63.

SOUCEK, J.; MOTYCKA, K.; SLAVIK, K.

Activity changes of some enzyme systems interfering in  
folic acid metabolism in the course of mouse leukaemia of  
AKR-strain. Neoplasma 11 no.2:193-198 '64

1. Institute of Haematology and Blood Transfusion, Laboratory  
of Protein Metabolism, Prague, Czechoslovakia.

MOTYCKA, K.; SOUCEK, J.; SLAVIK, K.; JIRASEK, J.; JIRASEK, A.; Technical assistance: SMETANOVA, R.; FRANTOVA, L.; SIMONOVA, A.

The treatment of experimental mouse hemoblastosis. I. The effect of some new folic acid antimetabolites on cell transplanted leukemia in mice of the AKR strain. Neoplasma (Bratisl.) 11 no.4: 389-397 '64.

1. Institute of hematology and blood transfusion, Prague, Laboratory of protein metabolism and proteosynthesis. Charles University, Prague, 1-st pathological-anatomical institute, Charles University, Prague, Czechoslovakia.

MOTYCKA, K.; SOUCEK, J.; SLAVIK, K.; Technical Assistance: SMETANOVA, R.;  
FRANTOVA, L.; SIMONOVA, A.

The treatment of experimental mouse hemoblastosis. II. The effect  
of long-term administration of some folic acid antagonists on  
mice of the AKR strain. Neoplasma (Bratisl.) 11 no.4:399-408 '64.

1. Institute of hematology and blood transfusion, Prague, Laboratory  
of protein metabolism and proteosynthesis, Charles University, Prague,  
Czechoslovakia.

SOUCEK, J.; SOCHMAN, J.; MOTYCKA, K.; NOVOTNA, O.; SLAVIK, K.

The treatment of experimental mouse hemoblastosis. Part 3.  
Neoplasma (Bratisl.) 12 no.4:425-433 '65.

1. Institute of Hematology and Blood Transfusion, Laboratory  
of Protein Metabolism, Charles University, Prague, Czechoslo-  
vakia. Submitted June 13, 1964.

L 31201-66 RM  
ACC NR: AP6022554

SOURCE CODE: CZ/0008/66/000/001/0051/0063

AUTHOR: Slavikova, Vera; Slavik, Karel

ORG: Institute of Hematology and Blood Transfusions, Prague (Ustav hematologie a krevni transfuze); Laboratory for Metabolism of Proteins, Charles University, Prague (Laborator metabolismu bilkovin Karlovy university)

TITLE: Thymidylic acid synthetase

SOURCE: Chemické listy, no. 1, 1966, 51-63

TOPIC TAGS: DNA, biosynthesis, enzyme, nucleic acid

ABSTRACT: Thymidylic acid is a specific component of desoxyribonucleic acids and its biosynthesis is necessary for the reproduction of DNA and the cell partition. The enzymatic system catalysing the synthesis of thymidylic acid regulates the biosynthesis of DNA. The properties of this enzyme, and some inhibiting factors are discussed. Substrates and cofactors of its reactions, the mechanism of the reactions, the occurrence of thymidylate synthetase, determination of its activity, inhibition of its reactions, and its effect in the regulation of the synthesis of nucleic acids are described. Analogous enzymatic systems are discussed. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 065

Card 1/1

BLG

0915

0563

SLAVIK, Karel

Secondary wall switchboard RN according to the Czechoslovak  
standard 35 7149. Elektrotechnik 17 no.12:360 D '62.

DVORAK, Rajmund; SLAVIK, Jan

A case of spontaneous panniculit's of the Weber-Christian type. Vnitřní lek. 11 no.2:157-161 F '65

1. I. patologickoanatomická katedra University J.E. Purkyne v Brně (prednosta: prof. MUDr. J. Svejda, Dr.Sc.) a Vnitřní odd. nemocnice v Boskovicích, Obvodního ústavu národního zdraví Blansko (prednosta: MUDr. J. Spicka).



SLAVIK, I; KUNIAK, L.

Determination of lignin in bleached viscose.

P. 285. (CHEMICKÉ ZVESTI) (Praha, Czechoslovakia) Vol. 11, no. 5, May 1957

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958

MAPIK, Lashchov, int.

National seminar on the use of food waste for feeding animals.  
Vest ust zemedel 11 no.6:242 '64.

MAYATIN, A.A.; KRUTOUS, M.D.; GITARSKIY, V.S.; BORTCHENKO, V.S.; GORELIK, M.M.;  
VINOGRADOV, N.P.; KAUFMAN, D.I.; SLAVIN, I.S.; GELPASHVILI, M.N.;  
KIRPENEV, N.K.; FOZENBERGER, N.A.; NAFKHANENKO, Z.S.; KIPUS, L.A.;  
ZAYCHENKO, I.V.

Innovations. Bun. i der. prom. no.3:58-59 J1-S '64.

(MIRA 17:11)

SLAVIK, M.

Intracutaneous test with Motol antigen (Itam) in acute infectious hepatitis. Postepy mikrobiol 2 no.2:167-170 '63.

1. Institute of Epidemiology, Microbiology and Hygiene, University, Prague.

SLAVIK, M.; FABRY, P.; KRAUS, R.

Influence of previous nutrition of the donor on the behavior of skin homografts in rats. Acta chir. plast. (Praha) 6 no.4:285-291 '64.

1. Laboratory of Plastic Surgery, Czechoslovak Academy of Sciences, Prague (Czechoslovakia) (Director: Academician F. Burian); Institute of Human Nutrition, Prague (Czechoslovakia) (Director: Prof. J. Masek, M. D. D. Sc.) and Embryological Institute, Faculty of General Medicine, Prague (Czechoslovakia) (Director: Doc. Z. Vacek, M. D.).

SLAVIK, M.

Polar phenomena over the High Tatra. p. 17. KRASY SLOVENSKA. Bratislava.  
Vol. 31, no. 1, Jan. 1954.

SOURCE: East European Accessions List. (EEAL) Library of Congress.  
Vol. 5, No. 8, August 1956.

SLAVIK, Martin, inz.

Problem of the optimum number of cars for trains in railroad transportation at surface mines. Uhli 4 no.3:98-100 Mr '62.

1. Banske projekty, pracoviste Ostrov u Karlovyh Var.

L 41185-66 EWF(1) TJP(c) GG/BB

ACC NR: AP6030835

SOURCE CODE: CZ/0080/65/000/007/0183/0185

AUTHOR: Slavik, Miroslav; Mikes, Rudolf

ORG: VCHZ-Synthesia, n.p.; Research Institute of Industrial Chemistry,  
Pardubice-Semtin (Vyzkumny ustav prumyslove chemie)

TITLE: Pneumatic programming device of a new design

SOURCE: Automatizace, no. 7, 1965, 183-185

TOPIC TAGS: pneumatic device, computer programming

ABSTRACT: The article discusses the principles of pneumatic programming and describes the design of a new pneumatic programming device which is simple, easily maintained and serviced, and reliable. Its use is especially recommended where the cycle time is frequently changed. Orig. art. has: 4 figures.  
[JPRS: 32,496]

SUB CODE: 13, 09 / SUBM DATE: none

Card 1/1 hs

UDC: 62-55:621.54



MALEK, P.; BOREK, Z.; SLAVIK, R.

Experimental effect of x-rays on staphylococcal hyaluronidase.  
Cas. lek. cesk. 90 no.20:611-613 18 May 1951. (CML 20:9)

1. Of the Second Surgical Clinic of Charles University, Prague  
(Head--Prof. Jiri Divis, M.D.) and of Biogena National Enterprise (Director--L. Micochova, M.D.).

SLAVIK, RUDOLF

MALEK, Jiri, MUDr; HOUBA, Vaclav, MUDr; PRASILOVA, Floriana; SLAVIK, Rudolf

Effect of narcotic sleep on infection and bacterial intoxication.  
Cesk. hyg. epidem. mikrob. 2 no.3:210-224 June '53.

1. Z vyzkumneho strediska Biogeny n.p., Praha XII.  
(DIPHTHERIA, experimental,  
eff. of sleep ther.)  
(SLEEP, effects,  
on exper. diphtheria)

SLAVIK, Rudolf.

ZAHDRACNICKY, Jiri, MUDr; SLAVIK, Rudolf

Occurrence of antigenically diverse toxin of beta hemolytic  
Streptococci in scarlet fever. Cesk. hyg. epidem. mikrob. 2 no.4:  
264-269 Aug '53.

1. Ustav epidemiologie a mikrobiologie v Praze, reditel doc. Dr  
Karel Raska a Biogena, n.p., red. Dr Jiri Malek.

(SCARLET FEVER, immunology,

antigenic properties of B hemolytic Streptoc. toxins in)  
(STREPTOCOCCUS,

hemolytic B, antigenic properties of toxins in scarlet fever)

SLAVIK, V.

SLAVIK, V. Practical methods for calculating slabs for bridges in Eastern  
Germany. p. 417.

Vol. 4, No. 9, Sept. 1956.

INZENYRSKE STAVEBY.

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accession, Vol. 6, No. 3, March 1957

COUNTRY : Czechoslovakia F  
CATEGORY :  
ABS. JOUR. : RZKhim., no. 1959, No. 86416  
AUTHOR : Slavik, V.; Trnka, F.  
INST. :  
TITLE : A High-Pressure Laboratory Autoclave with  
Electromagnetic Stirrer  
ORIG. PUB. : Chem. prumysl, 1959, 9, No 4, 193-194  
ABSTRACT : A Laboratory autoclave of 400 ml capacity  
made of AK2 steel and designed for high-pressure studies,  
has been built and tested.

CARD:

Oxidation of isotactic polypropylene

22175

S/190/61/003/007/019/021  
B.O./B230

tube, was measured by a Wheatstone bridge. Volatile acids were determined by passing  $O_2$  through the heated reaction vessel and subsequent bubbling through  $Ba(OH)_2$ . Acid quantity absorbed was determined by titration. For determining the acetaldehyde and formaldehyde, the gaseous products were trapped in a 0.1 molar solution of  $LiOH$ ; the aldehydes were determined by polarography. Acetic acid was determined by conversion to calcium acetate, heating to high temperature, and reacting the acetone produced with o-nitro-benzaldehyde in alkaline medium. Reducing the sample with magnesium powder, presence of formic acid was proved by drop reaction with phenylhydrazin hydrochloride and potassium ferrocyanide. Passing the reaction products with  $O_2$  in the absorber failed to turn out reproducible results. These were obtained by following arrangement of experiment: A test tube, lined inside with solid  $KOH$ , was placed into the reaction vessel. Into this test tube the polymer film (0.1 mm thick, weight 0.03 g) wound around a glass tube was introduced leaving a clearance of about 3 mm between  $KOH$  and film. Fig. 5 shows the experiment results at  $150^\circ C$ . The maximum oxidation rate was rapidly attained after the beginning of

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S/190/61/003/007/019/021  
B'O1/B230

Oxidation of isotactic polypropylene

oxidation. It was depending on the surface area of the sample and, here-  
with, on the rate of diffusion. After consuming 0.73 moles of  $O_2$  per  
mole of monomer links, oxidation ceased. About 50 % of the original  
weight of the sample were left over. In the oxidation products were  
found: acetic and formic acids; acetaldehyde and formaldehyde occurred  
only in subsequent phases of oxidation. For formaldehyde, merely qua-  
litative determination was possible, probably, for being oxidized either  
to formic acid or to  $CO_2$ . Formation of acetaldehyde and acid products  
was in correspondence with the Arrhenius equation. For the formation of  
volatile acids  $E = 22$  kcal, for the formation of acetaldehyde  $E = 30.4$   
kcal was calculated. Various possible types of reactions were discussed:  
1) Isomerization of the peroxide radicals with formation of formaldehyde  
and acetaldehyde; 2) decomposition of peroxides with formation of alcohol  
groups in the chain; 3) breaking the chain and decomposition of hydro-  
peroxide; formation of the radical  $CH_2-\overset{\overset{CH_3}{|}}{CH}\cdot R_2$  forming again a peroxide;

Card 3/5

25215

S/90/61/003/007/019/021  
B'01/B230

Oxidation of isotactic polypropylene

this may decompose a) forming an alcohol group at the end of the chain; b) forming formaldehyde and acetaldehyde. From Fig. 5 it is deduced that the rate of formation of volatile acids is lower by two orders of magnitude than the rate of  $O_2$  absorption. At maximum oxidation rate merely 8 % are ascribed to reactions 1) and 3b). Accordingly, in the first phase of oxidation, predominantly alcohols are formed. Mentioned are: V. B. Miller, M. V. Neyman, V. S. Pudov, Yu. A. Shlyapnikov, and L. I. Lafer. There are 6 figures and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc. The reference to English-language publication reads as follows: W. L. Hawkins, W. Matreyek, F. H. Winslow. Papers presented at Boston Meeting of American Chemical Society, 12. 30. 1959.

ASSOCIATION: Scientific Research Institute of Macromolecular Chemistry, Brno

SUBMITTED: January 7, 1961

Card 4/5



NOVAK, Karel; SLAVIK, Vladimir

Determination of trace amount of oxygen in gases. Chem prum 12 no.4:  
193-195 Ap '62.

1. Vyzkumny ustav makromolekularni chemie, Brno.

L 34940-66 FWP(t)/ETI IJF(c) JD

ACC NRAP6026602

SOURCE CODE: CZ/0057/65/000/012/0529/0531

AUTHOR: Vasicek, Oldrich (Doctor); Slavik, Vladimir (Engineer)

23

ORG: [Vasicek] TEVUH, Prague; [Slavik] NHKG, Ostrava

2

TITLE: Experience in repairs of panel type Martin's furnaces

SOURCE: Hutnik, no. 12, 1965, 529-531

TOPIC TAGS: metallurgic furnace, metallurgic industry

ABSTRACT: The panel type furnaces show a shorter down time than the furnaces of the classical type; the cost of lining them is also lower than in the usual type. The article covers experience with 8 furnaces that have been in production since 1961. Orig. art. has: 3 tables. [JPRS: 34,512]

SUB CODE: 13, 05 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 001

Card 1/1

09/6

2298

L 3753-66

ACCESSION NR: AP5027816

CZ/0057/65/000/001/0019/0021

AUTHOR: Slavik, Vladimir (Engineer)

TITLE: Usage of refractory materials in the steel works of Klement Gottwald

SOURCE: Hutnik, no. 1, 1965, 19-21

TOPIC TAGS: furnace, refractory, refractory product, steel

ABSTRACT: The relative usage of various refractory materials in different types of furnaces is discussed. The damage to specific parts of furnaces is evaluated. Ways and means of achieving longer life of refractories are discussed. The article is based on practical experience gathered in a period of 14 years. Bricking techniques with recovery of used linings are evaluated. Orig. art has: 2 tables.

ASSOCIATION: NHKG, Ostrava

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, IE

NO REF SOV: 000

OTHER: 000

JPRS

Card 1/1

DRIMAL, J.; PAVEK, K.; SELECKY, F.V.; Techn. spolupraca: SLAVIKOVA, E.; NEMCEK, V.

Study of the therapeutic effect of NA2EDTA on an experimental model of ventricular tachycardia caused by digoxin. Bratisl. lek. listy 45 no.6:339-352 30 S '65.

1. Farmakologicky ustav Ceskoslovenske akademie ved (riaditelka prof. MUDr. H. Raskova, DrSc.; veduci Slovenskych pracovisk MUDr. F.V. Selecky, CSc.)

CZECHOSLOVAKIA / Forest Science. Biology and Typology of Trees. K-2

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77479

Author : Slavik, Bohdan; Slavikova, Jirina; Jenik Jan

Inst : Not given

Title : Ecological Conditions of Restoration on Clearcuttings  
in Mixed Forests

Orig Pub : Rozpr. CSAV. Rada MPV, 1957, 67, No 2, 1-155

Abstract : Investigations were carried out in the dry forest type in the central part of Chekhia in mature mixed (oak, beech, larch, hornbeam, pine, fir) plantations. The detailed characteristic is cited on the spread of precipitation on the clearcuttings, changes of relative humidity of the air in comparison with conditions under cover, intensity of insulation, light and temperature cycle, evaporation and transpiration, microbiological processes in the soils of the clearing, changes in the composition of the grass

Card 1/3

SLAVIKOVA, J.; ADAMEK, R.

Laboratory investigations of the ability of intestinal microbes to survive in soil.  
p. 446.

CESKOSLOVENSKA HYGIENA. Praha, Czechoslovakia. Vol. 4, no. 8, Sept. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

*Slavikova, J.*

CHVAPIL, J.; ADAMEK, R.; SLAVIKOVA, J.  
Technical work by KRUIKOV, H.

CSSR

Hygiene and epidemiological station (Hygienicko-epidemiologicka stanice)  
UNZ-MV, Prague

Prague, Ceskoslovenska hygiena, No 2, 1963, pp 78-88

"Study of Aëroplancton of the Air in the City of Prague"

(4)

SLAVIKOVA, K.

"Microbiostratigraphic investigation of the coal basin in Southern Slovakia."  
p.397 (Vestnik, Vol. 32, no. 6, 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (MEAI) LC, Vol. 7, No. 8, August 1958



SLAVIKOVA, Leonora

CZECH ☒ Alkaloids of the Papaveraceae. II. Separation of chelerythrine and sanguinarine, and detection of two new alkaloids in *Chelidonium majus* L. Jifi Slavik and Leonora Slaviková (Masarykova Univ., Brno, Czech.). *Chem. Listy* 48, 1382-6 (1954); *Collection Czechoslov. Chem. Commun.* 20, 21-26 (1954) (in German).—In addn. to chelerythrine (I) and sanguinarine (II), two new alkaloids forming nonbasic pseudocyanides were isolated from *Chelidonium majus* L., viz. *chelirubine* (III) (forming purple salts), and *chelilutine* (IV) (forming orange salts). By direct crystn., only chelerythrine was obtained in sufficient purity in form of its pseudocyanide, m. 253-9° (from Me<sub>2</sub>CO), the other three alkaloids being obtained by chromatography over Al<sub>2</sub>O<sub>3</sub>. I m. 282-3° (decompn.) 207-8° (from CHCl<sub>3</sub>-EtOH mixt.); pseudocyanide, m. 200-1° (from CHCl<sub>3</sub>-EtOH). II m. 260-7° (decompn.) (on rapid heating it m. 275-8°), m.p. after boiling with CHCl<sub>3</sub>-EtOH mixt. 205-6°; pseudocyanide, m. 238-9° (from CHCl<sub>3</sub>-EtOH). Paper chromatography on Whatman no. 1 in BuOH-AcOH-H<sub>2</sub>O 160:10:30 (a), and 85:1:14 (b) gave the following values *R<sub>f</sub>* (a,b): I 0.56, 0.25; II, 0.44, 0.25; III, 0.55,

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*JIRI SLAVIK*

0.49; and IV, 0.65, 0.49. III. Alkaloids of *Eschscholtzia californica* Cham. Chem. Listy 1387-90; Collection Czechoslov. Chem. Commun. 20, 27-30 (in German).—The following alkaloids were found in *Eschscholtzia californica* Cham.: chelerythrine, sanguinarine, chelirubine, chelilutine, protopine (m. 208-7°),  $\alpha$ - and  $\beta$ -allocryptopine (m. 159-60 and 169-70° resp.), and bases of phenolic nature. Pseudocyanides of chelerythrine (m. 209-70°), sanguinarine (m. 237-8°), and chelirubine (m. 259-60°) were identical with compds. prepd. from *Chelinodium maius* L. IV. Alkaloids of *Glaucium flavum* Crantz. Jiri Slavik. Chem. Listy 1391-3; Collection Czechoslov. Chem. Commun. 20, 32-5 (1955) (in German).—From the root of *Glaucium flavum* Crantz. were isolated: protopine, m. 208° (from EtOH),  $\alpha$ -allocryptopine, m. 158-9° (from EtOH), chelirubine (pseudocyanide, m. 268-9°), sanguinarine (pseudocyanide, m. 237-8°), and chelerythrine (pseudocyanide, m. 260-1°). No glaucine was found in the root. M. Hudlický

SLAVIKOVA, L.

Alkaloids of the Papaveraceae. II. Separation of chelerythrine and sanguinarine and the isolation of two new alkaloids from Chelidonium majus L. III. Alkaloids of Eschscholtzia californica Chem. In German. p. 21

Vol. 20, no. 1, Feb. 1955  
SBORNIK CHEKHOSLOVATSKIKH KHMICHESKIRH RABOT  
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

SLAVIKOVA, LEONORA

5000

Alkaloids of papaveraceae. VI. Alkaloids of *Macleania microcarpa*. Jifi Slavik and Leonora Slavikova (Masarykova Univ., Brno, Czech.). *Chem. Listy* 49, 100-107; *Collection of Czechoslov. Chem. Commun.* 20, 358-61 (1955) (in German); cf. *C.A.* 49, 11673b. Acidified-water extn. of leaves of *Macleania microcarpa* (Maxim.) Fedde yielded 0.0% alkaloids from which were isolated protopine, m. 207°, cryptopine,  $\alpha$ - and  $\beta$ -allocryptopine, m. 160-1° and 169°, chelerythrine (I), and sanguinarine (II). From the resp., EtOH ext. of the plant roots was obtained 1.23% alkaloids, composed of the above alkaloids, as well as cheiridine (III), cheliduline (IV), coptisine (V), berberine (VI), and a new alkaloid, macarpine (VII), colorless base [HCl salt, bright red needles (from dil. HCl); pseudocyanide, m. 238° (from CHCl<sub>3</sub>-EtOH)]. *R<sub>f</sub>* values for BuOH-AcOH-H<sub>2</sub>O (100:10:30) (descending method) are listed: I 0.55, II 0.43, III 0.53, IV 0.65, V 0.40, VI 0.62, tetrahydro derivatives of V and VI 0.70 and 0.79, resp., and VII 0.50. M. Hudlický

MA  
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SLAVIKOVA, LEONORA

Alkaloids of papaveraceae. VII. *Argemone mexicana*.  
Leonora Slaviková and Jiří Slavík (Masarykova Univ.  
Brno, Czech.). *Chem. Listy* 49, 1548-9 (1955); cf. *C.A.*  
50, 1050e. — Extn. with EtOH of superterranean parts and  
of roots of *argemone mexicana* L. cultivated in Czechoslovakia  
gave the following alkaloids (amt. in %, resp.): *allocryptop-*  
*pine*, m. 160-1° (0.047, 0.009); *protopine*, m. 206-7° (0.028,  
0.091); *berberine* (0.012, 0.041); *dihydrosanguinarine*  
(0.011, —); *dihydrochelerythrine* (0.003, —); *sanguinarine*  
and *chelerythrine* (0.001, —); *coptisine* (—, traces); *sangui-*  
*narine* (—, 0.005).  
M. Hudlický.

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SLAVIKOVA, L.

SLAVIKOVA, L. Alkaloids of the poppy family (Papaveraceae). VII.  
Argemone mexicana L. In German. p. 211. Vol. 21, No. 1,  
Feb. 1956. SBORNIK CZECHOSLOVATSKIKH KHMICHESKIKH RABOT.  
COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. Praha,  
CZECHOSLOVAKIA.

SOURCE: EAST EUROPEAN ACCESSIONSLIST (EEAL) Vol. 6, No. 4, April 1957

Slaviková, L.

✓ Polaregraphy of alkaloids. XXI. The constitution of  
protopine and related compounds. J. Slavik, L. Slaviková,  
V. Preininger, and F. Santavy. *Collection Czech. Chem.*  
Commun. 21, 1068-82 (1956) (in German).—See C.A. 50,  
10564c. R. L. C.

SLAVIKOVA, L.

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Polarography of alkaloids. XXI. The constitution of protopine and related compounds. J. Slavik, L. Slaviková, V. Preininger, and F. Santavy (Univ. Olomouc, Czech.). Chem. Listy 50, 656-9 (1956); cf. C.A. 49, 10089z. — Polarographic studies of the dependence of the kinetic wave of protopine (I) on pH lead to the conclusion that in an acid soln. the carbonyl group of I is not preserved. A polarographically reducible group is found in the pH range 6-11. The carbonyl group of substances having quaternary N in the mol. remain preserved in the entire range of the Britton-Robinson buffer soln. This is concluded from the pH-dependence of the 2-electron-diffuse-wave of protopine methiodide. V. Štárla

PM



SLAVIKOVA, L.; SLAVIK, J.

Alkaloids of the Papaveraceae. VIII. Glaucium corniculatum Curt. p. 969.  
(Chemicke Listy, Praha. Vol. 50, no. 6, June 1956.)

SO: Monthly List of EastEuropean Accession (EEAL) LC, Vol. 6, no. 7, July 1957. Uncl.

SLAVIK, J.; SLAVIKOVA, L.

Alkaloids of the poppy plants (Papveraceae). XI. Some additional alkaloids from *Glaucium flavum* Cr. and *G. flavum* var. *fulvum* (Smith) Fedde. In German. Coll.Cz.Chem. 24 no.9:3141-3147 S '59. (KEAI 9:5)

1. Institut fur medizinische Chemie, Masaryk-Universitat, Brno.  
(ALKALOIDS) (PAPAVERACEAE) (POPPY) (HORN POPPY) (GLAUCIUM)

SLAVIKOVA, L.; TSCHU SHUN; SLAVIK, J.

Alkaloids of poppy plants (Papaveraceae). XIV. Alkaloids from  
Argemone alba Lestib. Coll Cz chem 25 no.3:756-760 Mr '60.  
(EEAI 9:12)

1. Institut für medizinische Chemie, Masaryk-Universität, Brno  
(for Slavikova, Slavik). 2. Jetzige Adresse: Institut für  
Pflanzen-Chemie, Chinesische Akademie der Wissenschaften, Peking  
(for Tschu Shun)  
(Alkaloids) (Papavereceae) (Argemone alba)

SLAVIK, J.; SLAVIKOVA, L.

Alkaloids of poppy plants (Papaveraceae). XVII. New alkaloids from  
Sanguinaria canadensis L. Coll Cz Chem 25 no.6:1667-1675 Je (60.  
(EEAI 10:9)

1. Institut für Medizinische Chemie, Masaryk-Universität, Brno.

(Poppy) (Papaveraceae) (Alkaloids)  
(Sanguinaria canadensis)

SLAVIK, J.; SLAVIKOVA, L.

Alcaloids of poppy plants (Papaveraceae). Part 19: Alcaloids from  
*Dicranostigma lactucoides* Hook. F. et Thoms. Coll Cz Chem 26 no.7:  
1839-1844 J1 '61.

1. Institut fur medizinische Chemie, Purkyne Universitat, Brno.

(Slavik, J.) (Slavikova, L.)

SLAVIK, J.; SLAVIKOVA, <sup>L.</sup>~~...~~

Alkaloids of poppy plants (Papaveraceae). Pts. 21-24 Coll  
Cz Chem 28 no.7:1720-1746, 1917-1919 J1 '63.

1. Institut fur medizinische Chemie, Purkyne-Universitat,  
Brno.

CZECHOSLOVAKIA

SLAVIK, J; SLAVIKOVA, L.

Institute of Medical Chemistry of Purkyne University, Brno  
Prague, Collection of Czechoslovak Chemical Communications,  
No 7, 1963, pp 1728-1736

"Alkaloids of Poppy Plants (Papaveraceae) XXII. On the  
Alkaloids of Argemone platyceras Link and Otto."

CZECHOSLOVAKIA

SLAVIK, J; SLAVIKOVA, L.

Institute of Medical Chemistry of Purkyne University (Institut  
fur medizinische Chemie, Purkyne-Universitaet), Brno  
(for both)

Prague, Collection of Cæchoslovak Chemical Communications,  
No 9, 1963, pp 2530-2533

"Alkaloids of the Poppy Plant (Papaveraceae) XXV. Alka-  
loids of Glaucium ~~oxylobum~~ oxylobum Boiss. et Buhse."



SLAVIK, J.; SLAVIKOVA, L.; APPELT, J.

Alkaloids of the poppy family (Papaveraceae). Pt.28. Coll Cz  
Chem 30 no.3:887-891 Mr '65.

1. Institut fur medizinische Chemie, Purkyne-Universitat,  
Brno. Submitted June 29, 1964.

CZECHOSLOVAKIA

SLAVIK, J; SLAVIKOVA, L; DRABENEC, J.

1. Institute for Medical Chemistry, Purkyne University,  
Brno - (for 1); 2. Research Institute for Organic Synthesis,  
Pardubice-Rybitvi - (for 1).

Prague, Collection of Czechoslovak Chemical Communications,  
No 11, November 1965, pp 3697-3704.

"Sasparecene alkaloids. Part 30: Further alkaloids from  
the *Chelidonium majus* L."

CZECHOSLOVAKIA

SLAVIK, J; APPELT, J; SLAVIKOVA, L.

Institute for Medical Chemistry, Purkyně University, Brno.

Prague, Collection of Czechoslovak Chemical Communications,  
No 11, November 1965, pp 5961-5963.

"Papaveraceae alkaloids. Part 31: Alkaloids from Papaver  
commutation Fisch et Mey."

L 11211-66 EWT(m)/EWP(t)/EWP(k)/EWP(b)/EWA(c) IJP(c) JD/HW

ACC NR: AP6000617

SOURCE CODE: UR/0135/65/000/012/0018/0020

AUTHOR: Slavin, G. A. <sup>44,55</sup> (Candidate of technical sciences); Petrov, A. V. <sup>44,55</sup> (Candidate <sup>57</sup> of technical sciences); Smirnova, S. V. <sup>44,55</sup> (Engineer); Korotkova, G. M. <sup>44,55</sup> (Engineer) <sup>B</sup>

ORG: none

TITLE: Automatic pulsed-arc welding of thin aluminum-alloy sheets with a nonconsumable electrode <sup>44,55</sup> <sup>44,55 27</sup>

SOURCE: Svarochnoye proizvodstvo, no. 12, 1965, 18-20 <sup>metal</sup>

TOPIC TAGS: aluminum, aluminum alloy, ~~alloy sheet~~, ~~thin sheet~~, ~~sheet welding~~, ~~alloy welding~~, arc welding, ~~pulsed arc welding~~, ~~nonconsumable electrode welding~~, TIG welding/AMg6/alloy <sup>4</sup>

ABSTRACT: Aluminum-alloy sheets 0.2—1.0 mm thick can be successfully joined by pulsed-arc TIG welding in which two arcs are employed: a continuously maintained low-ampere pilot arc and a pulsed welding arc. Such a pulsed arc under optimum conditions produces better penetration with a considerably lower heat input, thus reducing warpage and the danger of burning through. The effectiveness of the pulsed arc is determined by the current and duration of pulse, the ratio of pause duration to pulse duration (G), and the pitch of the weld spots. Experiments conducted with AMg6 alloy sheets showed that for each thickness within 0.2—1.0 mm there is an optimal range of parameters. The minimum warpage in sheets 0.5 and 0.7—1.0 mm thick is achieved at a G of 1.5—3.0 and 1.0—2.0, respectively. The optimum duration

Cord 1/2

UDC: 621.791.753.93-52:669.715-415

L 11211-66

ACC NR: AP6000617

of the total cycle (pulse + pause) for sheets 0.5 mm and 0.7—1.0 mm thick was 0.16—0.32 sec and 0.28—0.42 sec, respectively. Shorter cycle durations result in weld contamination and increased warpage. The data obtained in these experiments were used in designing power sources for pulsed-arc welding and were compiled into five nomograms from which total cycle, pulse and pause duration, arc current, and spot pitch can be selected. Orig. art. has: 6 figures. [DV]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 41.74

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CZECHOSLOVAKIA

SLAVIKOVA, L; SLAVIK, J

Institute of Medical Chemistry, Purkyne University  
(Institut für medizinische Chemie, Purkyne-Universität),  
Brno - (for both)

Prague Collection of Czechoslovak Chemical Communications.  
No 3, March 1966, pp 1355-1362

"Alkaloids of poppy plants (Papaveraceae). Part 32:  
On the alkaloid from the plant Hyoscyamus aurea-  
efolia SWEET and on the constitution of Hf I alkaloids."

SKALICKOVA, O.; JEZKOVA, Z.; SLAVIKOVA, V.; with the technical cooperation  
of MORAVCOVA, S.; MECHURA, B.

Immunological aspect of psychiatric gerontology. Rev. czech. med.  
8 no.4:264-275 '62.

1. **Psychiatric** Clinic of Charles University, Prague; Director: Prof.  
J. Horejsi, Dr.Sc. Institute of Haematology and Blood Transfusion,  
Prague; Director: Prof. J. Horejsi, Dr.Sci. Bohnice Mental Hospital,  
Prague; Director: Dr. K. Dobisek.

(PSYCHOSES, SENILE) (ANTIBODIES)  
(CEREBROSPINAL FLUID) (BLOOD PROTEIN ELECTROPHORESIS)

MOTYCKA, K.; SOCHMAN, J.; SLAVIKOVA, V.; SLAVIK, K.

The difference in mechanism of action of aminopterin and some of its derivatives. *Physiol. Bohemoslov.* 11 no.2:101-106 '62.

1. Institute of Haematology and Blood Transfusion, and Laboratory of Protein Metabolism, Charles University, Prague.

(AMINOPTERIN pharmacol)



SLAVIKOVA, V.; SLAVIK, K.; PRISTOUPILOVA, K.

Metabolism of folic acid. Part 8: Mechanism of biochemical action of some 4-amino analogues of folic acid and their dibromo derivatives. Coll Cz Chem 27 no.8:1955-1963 Ag '62.

1. Laboratory for Protein Metabolism and Synthesis, and Institute of Hematology and Blood Transfusion, Prague.

\*

SKALICKOVA, Olga; JEZKOVA, Zdenka; SLAVIKOVA, Vlasta; technicka spoluprace  
MORAVCOVA, S.; MECHURA, B.

Psychiatric gerontology from the viewpoint of immunology. Cesk.  
psychiat. 48 no.1:1-10 F '62.

1. Psychiatricka klinika KU, Ustav hematologie a krevni transfuze  
v Praze.

(PSYCHOSES SENILE immunol) (CEREBRAL ARTERIOSCLEROSIS immunol)

SLAVIKOVA, V.

"Micromethods for clinical and biochemical laboratories" by  
Herman Mattenheimer. Reviewed by V. Slavikova. Chem listy 57  
no.6:663-664 Je '63.

L 31201-66 RM

ACC NR: AP6022554

SOURCE CODE: CZ/0008/66/000/001/0051/0063

AUTHOR: Slavikova, Vera; Slavik, Karel

ORG: Institute of Hematology and Blood Transfusions, Prague (Ustav hematologie a krevni transfuze); Laboratory for Metabolism of Proteins, Charles University, Prague (Laborator metabolismu bilkovin Karlovy university)

TITLE: Thymidylic acid synthetase

SOURCE: Chemicke listy, no. 1, 1966, 51-63

TOPIC TAGS: DNA, biosynthesis, enzyme, nucleic acid

ABSTRACT: Thymidylic acid is a specific component of desoxyribonucleic acids and its biosynthesis is necessary for the reproduction of DNA and the cell partition. The enzymatic system catalysing the synthesis of thymidylic acid regulates the biosynthesis of DNA. The properties of this enzyme, and some inhibiting factors are discussed. Substrates and cofactors of its reactions, the mechanism of the reactions, the occurrence of thymidylate synthetase, determination of its activity, inhibition of its reactions, and its effect in the regulation of the synthesis of nucleic acids are described. Analogous enzymatic systems are discussed. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 065

Card 1/1

BLG

095

0563

SLAVIKOVA-MATOUKOVÁ, VERA

2  
Metabolism of folic acid. III. Transformations of  
Leucovorin. Karel Slavik and Věra Slaviková-Matouková  
(Ústřední lab. fak. nemocnic, Prague). Chem. Listy 50,  
1141-8(1956); cf. C.A. 48, 13748b. — Leucovorin (I)  
decomp. in aq. solns. and forms at pH 7, dihydroxanthop-  
terin which was identified by mixed chromatography and  
by absorption spectra. Enzymes isolated from pork liver  
decomp. I to a metabolite with yellow-green fluorescence  
which was identified as N<sup>5</sup>-hydroxymethylfolic acid accord-  
ing to the absorption spectra and degradation products.  
M. Hudlický

S/130/60/000/004/041/041/XX  
E073/E535

AUTHORS: Danilov, V. N. and Slavikovskiy, G.F. 16 17

TITLE: Detection of Boundary and Screw Dislocations in Silver

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1960,  
No.4, pp.122-125 + 2 plates

TEXT: Paper presented at the All Union Conference on Crystal  
Structure Defects, Kiyev, October, 1959.

Dislocation observations were made directly on the surface of polycrystalline silver during thermal etching in air and in vacuum. 99.9% purity silver was used in the experiments, since this metal hardly oxidizes at all at elevated temperatures. After rolling, grinding and polishing, the specimens were placed into a metallographic microscope; individual machining lines could be distinguished on the mirror surface. Annealing at relatively elevated temperatures was by means of an electric current, whereby the temperature was measured by a thermocouple and maintained constant for each of the specimens. During the process of annealing, changes in the reflecting surface of the silver were observed. At the initial instant of heating all non-uniformities which arose during grinding and polishing disappeared and the surface became perfectly smooth. ✓

Card 1/2

SLAVIKOVSKIY, N.A., inzh.; FILIN, L.G., inzh.

Long rails used for railroad yard tracks. Put' 1 put. khoz.  
no.5:18 My '59. (MIRA 12:8)

1.Zamestitel' nachal'nika distantsii st.Moskva-Kurskaya (for  
Slavikovskiy). 2.Starshiy dorozhnyy master stantsii Moskva-  
Kurskaya (for Filin).

(Railroads--Rails) (Railroads--Yards)

BLINOV, V.P.; SLAVIKOVSKIY, N.A.; FILIN, L.G., starshiy dorozhnyy master  
stantsiya Moskva-Kurskaya)

Transportation of welded rail units. Put' i put. khoz. no.6:29  
Je '59. (MIRA 12:10)

1.Nachal'nik tekhnicheskogo otdela sluzhby puti, stantsiya Moskva-  
Kurskaya (for Blinov). 2.Zamestitel' nachal'nik distantii puti,  
stantsiya Moskva-Kurskaya (for Slavikovskiy).  
(Railroads--Rails--Transportation)



KIRICHENKO, N.I., inzh.; SLAVIKOVSKIY, N.A.; FILIN,

Repair of rails damaged by skidding. Put' i put. khoz. no.8:21  
Ag '59. (MIRA 13:3)

1.Nachal'nik Moskovskoy distantii puti Moskovsko-Kursko-Donbasskoy  
dorogi (for Kirichenko). 2.Zamestitel' nachal'nika Moskovskoy distantii  
puti Moskovsko-Kursko-Donbasskoy dorogi (for Slavikovskiy). 3.Starshiy  
dorozhnyy master Moskovskoy distantii puti Moskovsko-Kursko-Donbasskoy  
dorogi (for Filin).

(Railroads--Rails)

SLAVIKOVSKIY, N.A.; YAKOVLEVA, Ya.P., inzh.

Experimental fastenings for reinforced concrete ties. Put' i put.  
khoz. no.12:12-13 D '59. (MIRA 13:4)

1. Zamestitel' nachal'nika distantii, stantsiya Moskva-Kurskaya  
(for Slavikovskiy).  
(Railroads--Ties, Concrete)

SEN'KO, M.F.; SLAVIKOVSKIY, N.A.; ALIKHODZHAN, B.A.; FILIN, L.G., inzh

Lengthening the life of rails. Put' i put.khoz. no.12:24 D  
'59. (MIRA 13:4)

1. Glavnyy inzhener sluzhby puti Moskovskoy dorogi (for Sen'ko).
2. Zamestitel' nachal'nika distantsii puti Moskovskoy dorogi  
(for Slavikovskiy). 3. Starshiy inzhener sluzhby puti Moskovskoy  
dorogi (for Alikhodzan).  
(Railroads--Rails)

SEN'KO, M.F.; KIRICHENKO, N.I.; SLAVIKOVSKIY, N.A.

Maintenance of continuous rail tracks and of long welded rails.

Put' i put.khoz. 4 no.6:7-8 Je '60. (MIRA 13:7)

1. Glavnyy inzhener sluzhby puti Moskovskoy dorogi (for Sen'ko).  
(Railroads--Maintenance and repair)

SLAVIKOVSKIY, N.A.; TATIYEVSKIY, A.M.

First experience in the maintenance of continuous tracks. Put' i  
put.khoz. 4 no.9:3-5 S '60. (MIRA 13:9)

1. Glavnyy inzhener Putevoy dorozhnoy mashinnoy stantsii No.1 Moskovskoy dorogi (for Tatiyevskiy).  
(Railroads--Maintenance and repair)

LAYKO, N.V.; TARTAKOVSKIY, R.N., kand.tekhn.nauk (g.Gomel'); SLAVIKOVSKIY,  
N.A.; BARANOV, G.G.

From practices of the maintenance of a continuous track. Put' i  
put.khoz. 5 no.12:12-15 D '61. (MIRA 15:1)

1. Zamestitel' nachal'nika distantzii puti, st. Molodechno,  
Belorusskoy dorogi (for Layko). 2. Zamestitel' nachal'nika  
Moskovsko-Kurskoy distantzii (for Slavikovskiy). 3. Starshiy  
dorozhnyy master Moskovsko-Kurskoy distantzii (for Baranov).  
(Railroads--Track)

SLAVIKOVSKIY, N. A.; KIRICHENKO, N. I.

Characteristics of the operation and maintenance of tracks  
with 25-meter long rails. Put' i put. khos. 6 no.10:28-29  
'62. (MIRA 15:10)

1. Nachal'nik distantsii puti, st. Moskva-Kurskaya.

(Railroads—Track)

SLAVIKOVSKIY, N.A.; BARANOV, G.G.; MAMONTOV, V.G., inzh.

Improving the relieving of temperature stresses. Put' i put.khoz.  
7 no.4:17-18 '63. (MIRA 16;3)

1. Moskovsko-Kurskaya distantiya Moskovskoy dorogi.  
(Railroads—Rails)



KIRICHENKO, N.I., inzh.; SLAVIKOVSKIY, N.A.

Maintenance and repair of tracks with long rails. Put' i put.  
khoz. 7 no.6:3-5 '63. (MIRA 16:7)

(Railroads--Track)

SLAVIN, A.

The KRM-2 electric kettles. Stroitel' 2 no.3:17-18 Mr '56.  
(Kettles) (Cement) (MLSA 9:12)

SLAY IN, A.

Plaster board; dry plaster. Stroitel' 2 no. 4-5:38-39 Ap-Mt '56.  
(Plaster board) (MIRA 10:1)

SLAVIN, A.

Organize more competitions for miniature automobiles. Za rul. 20  
no.5:7 My '62. (MIRA 16:4)

1. Predsedatel' Avtomodel'nogo komiteta Federatsii avtomoto-  
sporta SSSR.

(Automobiles—Models)

MINYAYEV, Ye.N., inzh., SLAVIN, A.A., inzh.

Modernized electrohydraulic automatic control system made by  
the "Komega" Plant. Energomashinostroenie 4 no. 6:36-39 Je '58.  
(MIRA 11:8)

(Automatic control)

SLAVIN, A.A.

1. Moscow, U.S.S.R. 1963

Automation of heating industrial boilers using the "Kristall" electronic-hydraulic system of automatic control. Avtomatiz. otop. kot. no.3:115-128 '63. (MIRA 16:10)

1. Moskovskiy zavod teplovoy avtomatiki.  
(Boilers) (Automation)

S/119/61/000/012/003/006  
D209/D306

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TITLE: Electronic-pneumatic system of autoregulation of  
M3TA (MZTA)

PERIODICAL: Priborostroyeniye, no. 12, 1961, 14-16

TEXT: The object of the development of the electronic-pneumatic systems of automatic control was to combine the accuracy of electronic systems with the explosion proof feature of pneumatic actuators. This type of regulators is applicable in power, petroleum, gas and chemical industries. Two versions of the system are used. In the first version the feedback circuit consists only of an amplifier. This RC feedback affects the range of dynamic adjustments of the regulator. In the other version the feedback together with the amplifier enclose the actuator. In this case the range adjustments are considerably wider and the adjustments of the isodrome time and the degree of feedback are independent. The following

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transmitters can be used with these regulators: Differential manometer  $\Delta MM-K$  (DMM-K), differential tension dynamometer  $\Delta TM-K$  (DTM-K), sensitive manometer  $\Delta MP-K$  (ChMP-K), boiler water salt meter transmitter CK.B (SKV) thermocouples  $TP$  (TP) and  $TPC$  (TPS) etc. In the first version in which the distribution valve is applied to an electro-pneumatic relay, the regulator has two relays, each of which controls the displacement of the piston in one direction only. A detailed description and operation of the relay is provided. The parameters of the servo motor are so chosen that the speed of displacement of the working piston is determined by the speed of displacement of the controlling stem only, and does not depend on external load. A manual control of the servo motor is also provided. In the second version of the system the transistorized amplifier is different. This system employs a pneumatic displacement transducer  $PDP$  (PDP) and a negative feedback unit. The transducer shown in Fig. 5 converts the servo motor working stem displacement into a pneumatic signal. It consists of 1- control ball; 2 - impulse spring; 3 - diaphragm.

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The construction and operation of the transducer is described. The purpose of the feedback unit (Fig. 6) is to obtain in the control loop a rigid or elastic feedback according to the position of servo motor. The sensing element of the unit is the bellows 1) dividing the unit into a working isodrome chamber; 2) plunger of an induction transducer; 3) 4) variable throttle. The electrical output signal is proportional to the bellows pressure drop. The working chamber is connected to the pneumatic displacement transducer and its pressure is determined by the position of the servo motor output lever. The induction transducer is energized by a special winding on the transformer in the measuring unit. The operation of the feedback unit is fully described. There are 6 figures.

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Inventions. Avtom. i prib. no.3:76-77 J1-S '64.

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ORG: none

TITLE: Analysis of self-oscillations in some relay systems

SOURCE: Avtomatika i telemekhanika, v. 26, no. 10, 1965, 1870-1878

TOPIC TAGS: control system stability, automatic regulation

ABSTRACT: An analysis of self-oscillations in relay systems whose linear portion contains an integrating link, an aperiodic first order link and pure delay. On the basis of the frequency characteristics method, nomograms are produced for determining the parameters of self-oscillations in such systems. Analytic equations are derived for the boundaries of the area of stability. The influence of free play is analyzed. The relay systems in question include constant-speed regulators and industrial process control systems with feedback. Orig. art. has: 7 figures and 19 formulas. [JPRS] 14

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Problems of the dynamics of the control of heat engineering  
processes by means of the "Kristall" system. *Prbn. energ.* 20  
no.7:31-34 J1 '65. (MIRA 18:12)